## SEQUENCE LISTING

## <110> University of South Florida University of South Florida

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<120> NOVEL SH2-CONTAINING INOSITOL 5'-PHOSPHATASE ISOFORM THAT PARTNERS WITH THE GRB2 ADAPTER PROTEIN
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Cys Thr	Thr Gly Cys Ala Thr Gly Cys Thr Ala C	ys Gly Cys Cys
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Ala Cys	Ala Cys Thr Gly Ala Ala Gly Ala Cys C	ys Ala Ala Gly
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Thr Cys	Cys Cys Ala Gly Ala Cys Thr Ala Ala G	aly Thr Thr Cys
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Thr Ala	Cys Thr Thr Gly Gly Ala Gly Thr Thr Cy	rs Cys Ala Cys
1625	1630 1635	
Thr Cys	Ala Ala Gly Cys Thr Gly Cys Thr Thr A	la Gly Ala Gly
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1655	1660 1665	
Cys Ala	Gly Gly Ala Ala Gly Gly Ala Gly Ala Gly	/ Ala Ala Thr
1670	1675 1680	
Gly Ala	Ala Gly Ala Gly Gly Ala Ala Gly Thr	Gly Ala Ala
1685		•
	Ala Gly Ala Gly Cys Thr Gly Gly Thr Gl	y Gly Thr Ala
1700	1705 1710	,
Cvs Glv	Gly Thr Thr Gly Gly Ala Gly Ala Gl	v Ala Cvs Thr
1715	1720 1725	,
Cvs Thr	Thr Cys Cys Cys Ala Ala Gly Cys Thr	Ala Ala Ala Gly
1730	1735 1740	,
	S Cys Ala Thr Thr Ala Thr Cys Thr Cys	Thr Glv Ala Cvs
1745	1750 1755	
	S Cys Gly Ala Gly Thr Ala Cys Thr Thr A	Ma Cvs Thr Glv
1760	1765 1770	iia oyoii aiy
	Cys Cys Ala Gly Cys Ala Thr Ala Thr C	vs. Cvs.Thr.Glv
1775		, c
	Cys Ala Gly Cys Ala Thr Thr Ala Ala Al	a Thr Cvs Cvs
1790	1795 1800	
	Thr Gly Ala Cys Ala Gly Thr Gly Ala Cy	vs Glv Ala Glv
1805		, o ally file ally
	Cys Thr Ala Thr Gly Gly Thr Gly Ala Al	a Gly Gly Cye
THE CYS	- Oya Hir Ala Hir Oly Oly Hir Oly Ala Al	a diy diy dyo

1820 1825 1830
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Thr Thr Gly Gly Ala Gly Ala Cys Cys Ala Cys Ala Gly Ala Gly
1850 1855 1860
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Gly Ala Gly Cys Cys Thr Thr Cys Thr Gly Gly Cys Ala Gly Gly
Gly Ala Gly Cys Cys Thr Thr Cys Thr Gly Gly Cys Ala Gly Gly 2060 2065 2070
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Gly Ala Gly Cys Cys Thr Thr Cys Thr Gly Gly Cys Ala Gly Gly 2060 2065 2070 Gly Thr Cys Cys Cys Thr Gly Cys Ala Thr Gly Thr Gly Gly Thr 2075 2080 2085
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Cys Thr Gly Cys Thr Gly Cys Thr Gly Cys Cys Ala Cys Ala

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Cys Ala	Cys Thr Gly Gly Gly Thr	Cys Thr Cys Ala Gly Ala Ala
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Cys Thr	Thr Gly Gly Ala Thr Thr	Cys Cys Thr Gly Gly Gly Cys
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Cys Thr	Thr Cys Thr Thr Cys Cys	s Ala Gly Thr Cys Gly Cys Cys
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-		Gly Cys Cys Thr Cys Cys Ala
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-		Gly Thr Gly Cys Cys Ala Gly
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_		Cys Cys Cys Ala Cys Thr Ala
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	• •	Thr Thr Ala Ala Ala Gly Ala
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		3300 Ala Cys Cys Gly Gly Cys Cys
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		Cys Thr Gly Cys Ala Gly Gly
ary ary	any Cyc in Cyc in Ala	Cyc in dig Cyc ind dig dig

Gly Ala Cys Cys Cys Gly Ala Ala Cys Ala Gly Thr Cys Thr Gly Cys Ala Thr Gly Gly Cys Thr Ala Ala Gly Thr Gly Gly Cys Ala Cys Ala Ala Gly Gly Ala Gly Cys Cys Thr Gly Gly Cys Cys Thr Gly Thr Cys Cys Ala Gly Cys Thr Thr Cys Ala Gly Ala Gly Ala Thr Cys Cys Ala Ala Gly Cys Thr Gly Cys Thr Thr Thr Thr Thr Gly Cys Thr Gly Gly Gly Gly Thr Thr Cys Thr Gly Thr Cys Ala Cys Ala Gly Gly Cys Cys Thr Gly Ala Thr Cys Cys Thr Cys Thr Thr Gly Gly Thr Thr Thr Thr Ala Thr Gly Gly Gly Gly Thr Thr Cys Ala Ala Gly Thr Cys Thr Gly Cys Cys Ala Gly Ala Gly Thr Cys Ala Gly Ala Ala Ala Thr Cys Ala Gly Cys Thr Cys Thr Ala Ala Cys Thr Cys Gly Cys Cys Ala Gly Thr Gly Ala Ala Gly Ala Gly Ala Thr Cys Thr Gly Gly Cys Cys Thr Thr Ala Ala Cys Thr Thr Ala Ala Gly Cys Cys Ala Gly Cys Cys Ala Cys Gly Thr Cys Ala Gly Gly Cys Cys Cys Cys Thr Gly Cys Thr Gly Ala Gly Cys Cys Thr Ala Thr Gly Gly Ala Cys Cys Ala Ala Thr Ala Ala Ala Thr Ala Cys Thr Cys Cys Cys Cys Gly Thr Gly Cys Cys Ala Cys Thr Gly Gly Ala Gly Gly Thr Gly Gly Gly Cys Ala Gly Cys Thr Ala Thr Cys Ala Cys Cys Ala Thr Ala Cys Cys Cys Thr Gly Ala Gly Thr Thr Gly Gly Gly Cys Cys Ala Ala Gly Cys Cys Cys Ala Cys Cys Cys Cys Ala Cys Cys Cys Cys Thr Ala Cys Cys Cys Thr Gly Cys Ala Ala Cys Ala Thr Thr Thr Cys Thr Gly Ala Thr Gly Thr Trp Cys Thr Gly Ala Gly Gly Ala Ala Gly Ala Gly Thr Cys Thr Cys Cys Ala Cys Cys Ala Thr Ala Gly Thr Cys Cys Cys Cys Ala Ala Gly Gly Gly Cys Thr Gly Ala Gly Thr Thr Cys Thr Cys Cys Ala Gly Cys Cys Thr Gly Cys Thr Ala Thr Cys

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Cys Thr Gly Cys Cys Cys Cys Cys Ala Gly Ala Gly Ala Ala Gly Thr
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Cys Ala Thr Cys Cys Gly Gly Ala Cys Cys Cys Thr Cys Cys Ala
  50
               55
                            60
Thr Cys Cys Cys Thr Gly Gly Ala Gly Thr Cys Thr Cys Thr Gly Cys
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                         75
65
                                      80
Ala Gly Ala Gly Gly Thr Thr Ala Thr Thr Thr Gly Ala Cys Cys Ala
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Gly Thr Thr Thr Thr Gly Cys Thr Gly Ala Cys Thr Cys Cys Ala
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Cys Ala Gly Ala Thr Gly Ala Ala Gly Ala Ala Cys Ala Ala Gly Cys
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Gly Ala Cys Cys Cys Cys Thr Gly Ala Gly Thr Gly Ala Gly Ala 740 745 750
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Ala Ala Ala Thr Ala Thr Thr Thr Ala Gly Cys Thr Cys Thr Cys Cys 580 585 590  Ala Gly Ala Cys Cys Ala Ala Ala Thr Cys Thr Thr Gly Gly Thr Gly 595 600 605  Ala Ala Ala Cys Cys Ala Thr Gly Cys Ala Thr Thr Thr Gly Cys 610 615 620  Ala Thr Thr Thr Gly Thr Gly Thr Gly Thr Gly Thr Cys Cys Thr Ala 625 630 635 640  Cys Ala Ala Ala Cys Ala Cys Thr Gly Ala Ala Gly Gly Thr Thr Ala 645 650 655
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Ala Ala Ala Thr Ala Thr Thr Thr Ala Gly Cys Thr Cys Thr Cys Cys 580 585 590  Ala Gly Ala Cys Cys Ala Ala Ala Thr Cys Thr Thr Gly Gly Thr Gly 595 600 605  Ala Ala Ala Cys Cys Cys Ala Thr Gly Cys Ala Thr Thr Thr Gly Cys 610 615 620  Ala Thr Thr Thr Gly Thr Gly Thr Gly Thr Gly Thr Cys Cys Thr Ala 625 630 635 640  Cys Ala Ala Ala Cys Ala Cys Thr Gly Ala Ala Gly Gly Thr Thr Ala 645 650 655  Ala Gly Ala Ala Gly Cys Ala Thr Gly Cys Thr Cys Cys Thr Thr Ala 660 665 670  Gly Thr Ala Ala Thr Thr Thr Thr Ala Thr Ala Gly Cys Ala Gly Thr 675 680 685  Thr Thr Gly Cys Gly Thr Thr Thr Cys Cys Ala Gly Ala Thr Thr Gly 690 695 700  Ala Ala Ala Ala Ala Cys Ala Gly Ala Thr Thr Cys Thr Ala Thr Ala Gly
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Ala Ala Ala Thr Ala Thr Thr Thr Ala Gly Cys Thr Cys Thr Cys Cys 580 585 590  Ala Gly Ala Cys Cys Ala Ala Ala Thr Cys Thr Thr Gly Gly Thr Gly 595 600 605  Ala Ala Ala Ala Cys Cys Ala Thr Gly Cys Ala Thr Thr Thr Gly Cys 610 615 620  Ala Thr Thr Thr Gly Thr Gly Thr Gly Thr Gly Thr Cys Cys Thr Ala 625 630 635 640  Cys Ala Ala Ala Cys Ala Cys Thr Gly Ala Ala Gly Gly Thr Thr Ala 645 650 655  Ala Gly Ala Ala Gly Cys Ala Thr Gly Cys Thr Cys Cys Thr Thr Ala 660 665 670  Gly Thr Ala Ala Thr Thr Thr Thr Ala Thr Ala Gly Cys Ala Gly Thr 675 680 685  Thr Thr Gly Cys Gly Thr Thr Thr Cys Cys Ala Gly Ala Thr Thr Gly 690 695 700  Ala Ala Ala Ala Ala Cys Ala Gly Ala Thr Thr Cys Thr Ala Thr Ala Gly 705 710 715 720  Gly Cys Thr Ala Cys Ala Cys Ala Gly Thr Gly Cys Thr Ala Ala Ala Ala Ala Cys Ala Cys Ala Gly Thr Gly Cys Thr Ala Ala Ala Ala Cys Ala Cys Ala Gly Thr Gly Cys Thr Ala Ala Ala Ala Ala Cys Ala Cys Ala Gly Thr Gly Cys Thr Ala Ala Ala Ala Ala Cys Ala Cys Ala Gly Thr Gly Cys Thr Ala Ala Ala Ala Ala Cys Ala Cys Ala Gly Thr Gly Cys Thr Ala Ala Ala Ala Ala Cys Ala Cys Ala Gly Thr Gly Cys Thr Ala Ala Ala Ala Ala Cys Ala Cys Ala Gly Thr Gly Cys Thr Ala Ala Ala Ala Ala Ala Cys Ala Cys Ala Gly Thr Gly Cys Thr Cys Ala Gly Ala Thr Thr Gly Gly Ala Thr Thr Ala Thr Gly Cys Thr Cys Ala Gly Ala Thr
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755 760 765	
Ala Cys Ala Gly Ala Thr Thr Gly Ala Ala Ala Ala Gly Gly Gly Thr	
770 775 780	
Cys Gly Gly Gly Gly Thr Cys Thr Gly Gly Gly Cys Cys Ala Gly G	ily
785 790 795 800	
Ala Thr Gly Ala Cys Gly Gly Cys Cys Ala Ala Cys Thr Ala Tl	٦r
805 810 815	
Cys Thr Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Gly	- hr
820 825 830	• • • •
Cys Cys Thr Thr Cys Ala Gly Gly Gly Ala Ala Gly Gly Gly Thr Th	nr.
835 840 845	"
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Ala Cys Ala Gly Gly Ala Thr Thr Cys Ala Cys Cys Ala Cys Thr G 850 855 860	пу
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Gly Gly Gly Thr Gly Thr Gly Gly Cys Cys Thr Ala Thr Cys Thr G 865 870 875 880	ıy
Cys Thr Gly Thr Thr Ala Gly Gly Ala Cys Cys Thr Gly Ala Ala Th 885 890 895	ır
Thr Gly Cys Cys Thr Gly Gly Ala Gly Thr Gly Thr Thr Thr Cys Tl	٦r
900 905 910	
Ala Gly Thr Thr Cys Cys Cys Ala Cys Thr Ala Gly Thr Thr Gly T	hr
915 920 925	
Thr Gly Ala Ala Cys Thr Thr Ala Cys	
930 935	
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1 5 10 15	
Gly Cys Cys Ala Thr Cys Cys Thr Gly Gly Ala Gly Thr Cys Thr C	)ys
20 25 30	
Thr Gly Cys Ala Gly Ala Gly Gly Thr Thr Gly Thr Thr Gly Ala	l
35 40 45	
Cys Cys Ala Ala Cys Ala Gly Cys Thr Cys Thr Cys Cys Cys	Ala
50 55 60	
Gly Gly Cys Cys Thr Thr Cys Gly Cys Cys Cys Ala Cys Gly Ala	Cys
65 70 75 80	
Cys Thr Cys Ala Gly Gly Thr Ala Ala Gly Gly Gly Gly Thr Thr Th	r
85 90 95	
Gly Gly Ala Thr Thr Gly Gly Ala Ala Ala Gly Ala Thr Gly Cys	
100 105 110	
Ala Ala Thr Thr Gly Cys Thr Ala Thr Ala Gly Gly Ala Gly Gly Gly	
115 120 125	
Ala Cys Thr Cys Thr Gly Ala Ala Gly Gly Cys Ala Gly Ala Cys A	a
130 135 140	
Gly Ala Cys Gly Cys Ala Cys Cys Gly Cys Cys Thr Cys Cys Thr	Cys
145 150 155 160	
Ala Cys Gly Thr Thr Gly Gly Cys Thr Ala Gly Thr Cys Thr Ala Al	a

165	5	170	175	
Thr Ala Thr A	la Ala Ala C	ys Ala Thr	Cys Gly C	sys Gly Gly Thr Gly
180	18	5	190	
Gly Ala Thr G	ly Gly Thr (	Gly Ala Gly	Gly Ala Th	nr Ala Gly Ala Cys
195	200	2	05	
Thr Cys Cys	Ala Thr Gly	Cys Cys C	ys Thr Thr	Thr Thr Gly Thr Gly
210	215	220		
Ala Ala Gly G	ly Cys Ala	Thr Thr Thi	· Cys Cys	Thr Gly Gly Cys Ala
225	230	235	24	
	aly Cys Thr	Cys Cys T	hr Gly Ala	Cys Thr Thr Cys Ala
245		250	255	,
Glv Ala Glv T			s Cvs Cvs	Ala Thr Cys Ala Gly
260	26		270	- <b>, ,</b>
				Gly Gly Thr Gly Thr
275	280		85	,,,,
				ly Thr Gly Ala Gly
290	295	300	,a c, c.	, , , , , , , , , , , , , , , , , , ,
			nr Thr Cvs	Cys Cys Ala Thr Cys
305	310	315	32	
				Gly Ala Ala Ala Thr
325	-	330	335	City Ala Ala Ala Tili
				ly Ala Ala Ala
340	a Ala Cily C	-	350	iy Ala Ala Ala Ala
				hr Cys Ala Gly Ala
355	360	-	65	TII Cys Ala Gly Ala
Cys Ala Cys	Thr Thr Ala	Ala Thr Cy	s Cys Cys	Thr Gly Gly Gly Ala
370	375	380		
Cys Thr Gly C	Cys Ala Ala	Ala Ala Th	r Gly Gly T	hr Gly Gly Thr Gly
385	390	395	40	0
Cys Cys Cys	Cys Thr Cy	s Cys Thr	Cys Cys A	la Cys Ala Gly Cys Thr
405	5	410	415	
Gly Cys Thr C	Cys Ala Cys	Gly Gly C	ys Gly Gly	Gly Gly Cys Ala Gly
420	42	5	430	
Gly Ala Gly A	la Thr Gly A	Ala Gly Gly	Gly Cys C	ys Gly Ala Ala Thr
435	440	4	45	
Gly Ala Ala G	ly Cys Ala	Thr Ala Asr	n Ala Thr C	cys Thr Ala Gly Cys
450	455	460		
Thr Ala Thr T	hr Thr Thr 1	hr Thr Thr	Thr Thr T	nr Ala Gly Asn Gly
465	470	475	48	•
				Thr Thr Ala Ala
485	-	490	495	
				ly Gly Ala Ala Gly
500	yordardar		510	y diy ma ma diy
	50	<b>-</b>		
515	509 Sve Cve Thr			Thr Thr Thr Ala Thr
	Cys Cys Thr	· Ala Ala Al	a Thr Cys	Thr Thr Ala Thr
	Cys Cys Thr 520	Ala Ala Al 5	a Thr Cys 25	
Asn Thr Thr A	Cys Cys Thr 520 Asn Thr Gly	· Ala Ala Al 5: Gly Cys Tl	a Thr Cys 25	Thr Thr Ala Thr Asn Thr Ala Ala Ala
Asn Thr Thr A	Cys Cys Thr 520 Asn Thr Gly 535	Ala Ala Al 5: Gly Cys Tl 540	a Thr Cys 25 hr Thr Thr	Asn Thr Ala Ala Ala
Asn Thr Thr A 530 Ala Gly Thr A	Cys Cys Thr 520 Asn Thr Gly 535 sn Ala Ala	· Ala Ala Al 5: Gly Cys Tl 540 Ala Asn Cy	a Thr Cys 25 hr Thr Thr s Thr Thr <i>i</i>	Asn Thr Ala Ala Ala Asn Thr Cys Cys Cys
Asn Thr Thr A 530 Ala Gly Thr A 545	Cys Cys Thr 520 Asn Thr Gly 535 sn Ala Ala / 550	Ala Ala Al 5: Gly Cys Tl 540 Ala Asn Cy 555	a Thr Cys 25 hr Thr Thr s Thr Thr 7 56	Asn Thr Ala Ala Ala Asn Thr Cys Cys Cys

56	5	570	575	
Cys Cys Cys	Cys Thr Th	nr Thr Asn	Ala Thr	Cys Asn Ala Cys Ala Cys
580	58	35	590	
Thr Thr Gly (	Gly Gly Ala	Gly Gly Cy	s Ala Al	a Ala Gly Gly Cys Ala
595	600		805	
	-	-	_	Ala Asn Thr Thr Gly Ala
610	615	620		
	-		Thr Gly	Gly Thr Cys Thr Asn Asn
625	630	635		640
Asn Gly Asn 64		Gly Thr II 650	nr Cys C 655	Cys Ala Asn Gly Ala Cys
Ala Asn Cys	Cys Ala Gly	Gly Cys 7	Thr Thr (	Cys Cys Cys Ala Asn Gly
660	66		670	
Thr Thr Thr	Thr Thr Thr	Thr Thr Th	r Cys Al	a Cys Ala Ala Ala Ala
675	680	6	85	
Cys Cys Cys 690	Thr Thr Th	r Thr Thr T 700		ıla Ala Ala Cys Cys Cys
				Asn Thr Ala Cys Thr Cys 720
	_		Asn Thi	Cys Ala Asn Thr Ala Cys
72		730	735	-
-	_			Cys Cys Cys Thr Cys Thr
740	74		750	• TI O TI •I O
755	Asn Cys Cy 760		Cys Asr '65	Asn Thr Cys Thr Ala Cys
Thr Thr Thr	Γhr Asn Thr	Asn Cys C	Cys Asn	Cys Thr Asn Asn Thr Gly
770	775	780	)	
Asn Asn Cys	Asn Ala Th	nr Thr Ala 1	Thr Thr 1	Thr Thr Cys Cys Thr Cys
785	790	795		800
Thr Thr Cys	Asn Cys Th		_	Thr Thr Ala Thr Ala Thr
80		810	815	
Asn Ala Asn 820	Ala Thr Ala 82		nr Cys T 830	hr Cys Cys Cys Ala Ala
				s Cys Thr Cys Thr Thr Thr
835	840	_	345	o oyo mii oyo mii mii mii
Ala Thr Thr (	Cys Thr Asr	Ala Asn A	sn Asn .	Asn Asn Ala Thr Thr Thr
850	855	860	)	
	_	_	aly Cys (	Cys Thr Cys Cys Asn Asn
865	870	875		880
Thr Thr Ala A 88:		n Thr Thr A 890	sn Asn 895	Thr Cys Cys Thr Cys Asn
=	-	-	-	Thr Thr Cys Cys Ala Thr
900 The Ass Char	90 Shr Tha Tha		910	vo The Cyo Aon Ala Aon
915	920 giy i i i i i i i i i i i i i i i i i i	-	sn Ala C 925	ys Thr Cys Asn Ala Asn
				Thr Cvc Thr Thr Ala Acn
930	935	940 940	-	Thr Cys Thr Thr Ala Asn
				a Asn Asn Asn Thr Thr Cys
945	950	955	ary Asi	960
			Asn Cvs	Thr Asn Asn Cys Cys Thr
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	965		970	9	975		
Asn Cys	Asn Cy	s Cys A	la Asn C	ys Cys	Cys		
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1	5	_	10	15		,	
Asn Ala A	la Gly	Ala Asn	Ala Asn	Asn As	sn Thr Th	r Thr Thr Asn Th	r
20		25		30			
		Ala Gly 40		Cys Cy 45	s Gly Cys	S Asn Asn Thr Ala	a
	hr Thr			-	· Δla Δla (	Gly Ala Asn Asn	
50		55	60	-		-	
Gly Gly A 65	sn Gly. 70		Asn Gly 75	' Ala As	sn Asn Th 80	r Asn Thr Ala Ala	а
Gly Gly A	la Asn 85	-	Cys Cys 90	s Ala As 95	-	y Asn Cys Gly As	3r
Cvo Aon						n Ala Ala Thr Ala	
_	)0	a Ala Giy 10	_	110		TAIA AIA TIII AIA	
Asn Asn (	Gly Ala	a Gly Gly 120	Asn Ala	Gly As 125	sn Cys Gl	y Ala Asn Ala Ala	a
	la Asn		Thr Thr		n Cvs Ala	Thr Asn Thr Asr	n
130		135		40			
	hr Thr		Cvs Ala	Cvs Cv	vs Asn As	n Gly Ala Asn Th	hi
145		50	155		160	,	
Thr Thr T					Ala Asn	Ala Thr Asn Ala	
	165		170		175		
Thr Gly A		Ala Ala A				Thr Gly Thr Asn	1
	30	18		190		,	
						Thr Gly Thr Asn	1
	hr Gly		Δen Δen		v Thr Cve	Thr Gly Thr Cys	
210	ili Giy	215		20	y IIII Oys	Till Gly Till Oys	,
Thr Ala T		Gly Gly	Thr Gly	Thr Gly	_	Thr Gly Cys Asn	
225 Ala Gly A		30 Ala Gly	235 Thr Gly		240 Thr Ala (	Gly Thr Gly Ala	
Chi Chi A	245		250		255 Ob. Ala 4	No Alo Chi Aon	
Gly Gly A	_	Ala Gly <i>1</i> 26		41a A1a 270	_	Ala Ala Gly Asn	
Ala Thr A 275	la Thr	Gly Ala ( 280	Gly Asn A	Ala Ala 285	Ala Gly A	Asn Gly Cys Ala	
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290		295		00	, cily		
	Cvs Th				alv Glv Th	ır Gly Thr Gly Gly	v
305	_	10	315	-	320		r
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325 330 335
Cys Cys Ala Gly Ala Thr Thr Gly Cys Cys Ala Thr Gly Cys Thr Thr
340 345 350
Gly Gly Gly Cys Ala Ala Ala Thr Thr Cys Cys Thr Thr Thr Thr 355 360 365
Asn Cys Cys Ala Asn Ala Ala Ala Cys Cys Ala Thr Cys Thr Thr Gly
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385 390 395 400
Cys Thr Cys Cys Thr Gly Gly Cys Thr Thr Ala Gly Gly Asn
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Gly Gly Cys Thr Thr Thr Asn Thr Gly Thr Asn Thr Gly Thr Thr
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Thr Thr Asn Ala Thr Thr Thr Thr Gly Thr Thr Thr Cys Ala 435 440 445
Thr Gly Ala Gly Ala Thr Ala Gly Gly Ala Cys Cys Cys Cys Ala
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Ala Ala Thr Ala Gly Cys Cys Thr Cys Cys Thr Thr Gly Ala Gly Thr 465 470 475 480
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485 490 495
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Thr Cys Gly Thr Cys Thr Thr Cys Cys Thr Ala Ala Thr Thr Ala Thr 545 550 555 560  Thr Ala Cys Cys Ala Gly Thr Cys Gly Ala Thr Gly Thr Thr Cys Ala 565 570 575
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Thr Cys Gly Thr Cys Thr Thr Cys Cys Thr Ala Ala Thr Thr Ala Thr 545 550 555 560  Thr Ala Cys Cys Ala Gly Thr Cys Gly Ala Thr Gly Thr Thr Cys Ala 565 570 575  Ala Thr Thr Ala Gly Cys Gly Gly Thr Thr Gly Thr Ala Ala Cys Ala 580 585 590  Ala Gly Gly Cys Cys Cys Cys Ala Gly Ala Gly Thr Gly Thr Gly Ala 595 600 605
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                                    735
Gly Cys Thr Gly Gly Gly Thr Thr Ala Cys Ala Cys Ala Thr Gly Gly
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                                  750
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    755
                  760
                               765
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                                    815
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                    825
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                              45
Gly Ala Gly Cys Cys Cys Cys Thr Ala Cys Cys Cys Ala Cys Cys Cys
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               55
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1475 1480 1485
Ala Ala Gly Gly Cys Thr Cys Thr Thr Ala Ala Ala Gly Gly
1490 1495 1500
Cys Ala Cys Ala Gly Gly Cys Ala Gly Thr Gly Cys Ala Thr Thr
1505 1510 1515
Gly Gly Gly Thr Ala Ala Ala Thr Gly Thr Gly Gly Cys Ala Ala 1520 1525 1530
Ala Thr Ala Ala Thr Thr Thr Cys Thr Thr Gly Ala Cys Ala 1535 1540 1545
Ala Ala Thr Cys Gly Ala Cys Cys Ala Ala Thr Thr Gly Thr Cys  1550 1555 1560
Ala Gly Ala Thr Thr Gly Gly Cys Cys Thr Gly Cys Thr Ala Gly
1565 1570 1575
Thr Cys Ala Thr Thr Gly Thr Thr Cys Ala Ala Thr Gly
1580 1585 1590
Ala Gly Ala Ala Cys Thr Gly Thr Thr Thr Thr Thr Cys Thr
1595 1600 1605
Cys Ala Ala Ala Gly Gly Ala Thr Gly Cys Thr Cys Thr Thr Gly
1610 1615 1620 Thr Ala Cys Ala Cys Cys Gly Gly Cys Thr Ala Gly Ala Ala Gly

1625 1630 1635	
Cys Ala Gly Gly Gly Cys Thr Gly Thr Cys Ala Thr Thr Thr Thr	
1640 1645 1650	
Thr Ala Thr Ala Gly Gly Thr Cys Thr Cys Thr Gly Thr Gly Gly	
1655 1660 1665	
Thr Ala Thr Thr Thr Gly Thr Thr Gly Thr Thr Gly Thr Thr	
1670 1675 1680	
Gly Thr Thr Cys Thr Gly Thr Thr Gly Thr Thr Gly Cys Ala Ala	
1685 1690 1695	
Ala Thr Cys Ala Thr Thr Thr Ala Thr Cys Ala Cys Thr Gly Ala	
1700 1705 1710	
Gly Gly Ala Ala Ala Ala Thr Ala Cys Ala Cys Ala Cys Ala	
1715 1720 1725	
Ala Ala Gly Gly Cys Cys Cys Thr Thr Thr Cys Thr Thr Thr	
1730 1735 1740	
Ala Ala Ala Gly Thr Ala Thr Ala Cys Ala Thr Gly Thr Ala	
1745 1750 1755	
Thr Cys Ala Thr Thr Thr Gly Thr Gly Ala Cys Ala Gly Cys	
1760 1765 1770	
Thr Cys Ala Thr Ala Ala Gly Ala Ala Gly Cys Thr Gly Thr Thr	
1775 1780 1785	
Thr Thr Thr Thr Cys Thr Gly Cys Cys Thr Gly Gly Ala Cys	
1790 1795 1800	
Ala Cys Ala Gly Gly Thr Cys Cys Thr Gly Ala Cys Cys Thr Gly	
1805 1810 1815	
Thr Gly Cys Thr Gly Thr Gly Thr Cys Cys Thr Thr Gly Cys Thr	
1820 1825 1830	
Ala Ala Gly Cys Thr Thr Thr Gly Thr Cys Ala Gly Ala Cys Cys	
1835 1840 1845	
Cys Thr Thr Cys Cys Ala Cys Ala Gly Cys Thr Cys Cys Cys	
1850 1855 1860	
Cys Cys Ala Ala Cys Ala Ala Cys Gly Ala Gly Thr Thr Cys Cys	
1865 1870 1875	
Cys Cys Ala Gly Thr Ala Cys Cys Thr Gly Cys Cys Thr Cys Ala	
1880 1885 1890	
Cys Cys Thr Cys Ala Thr Cys Ala Cys Thr Ala Thr Gly Gly Thr	
1895 1900 1905	
Gly Ala Cys Ala Gly Cys Ala Gly Cys Cys Thr Cys Thr Gly Ala	
1910 1915 1920	
Thr Gly Cys Gly Cys Thr Gly Ala Cys Thr Cys Thr Cys Thr Gly	
1925 1930 1935	
Gly Cys Ala Cys Ala Thr Thr Ala Thr Gly Gly Cys Ala Gly Thr	
1940 1945 1950	
Gly Thr Thr Ala Ala Ala Ala Gly Cys Thr Thr Cys Cys Ala Thr	
1955 1960 1965	
Cys Thr Cys Thr Cys Thr Thr Thr Gly Cys Thr Gly Ala	
1970 1975 1980	
Ala Thr Ala Ala Thr Gly Ala Ala Cys Cys Thr Cys Ala Gly Gly	
1985 1990 1995	
Thr Thr Gly Thr Thr Cys Ala Ala Gly Ala Gly Ala Cys Cys Gly	

2000 2005 2010	
Gly Ala Ala Thr Gly Thr Thr Cys Thr Thr Cys Ala Cys Cys Thr	
2015 2020 2025	
Gly Cys Cys Thr Gly Cys Ala Cys Ala Cys Ala Thr Cys Thr Cy	S
2030 2035 2040	
Thr Thr Cys Ala Cys Thr Thr Thr Cys Thr Thr Thr Ala Thr	
2045 2050 2055	
Ala Gly Ala Thr Cys Ala Gly Gly Thr Ala Gly Gly Gly Ala Cys	
2060 2065 2070	
Thr Gly Gly Gly Cys Gly Thr Gly Thr Ala Gly Ala Thr Gly Gly	
2075 2080 2085	
Ala Ala Cys Ala Ala Cys Thr Gly Thr Thr Thr Cys Cys	
2090 2095 2100	
Gly Thr Thr Cys Cys Cys Cys Ala Gly Cys Cys Ala Thr Cys Th	۱r
2105 2110 2115	
Cys Thr Gly Cys Ala Gly Gly Thr Gly Cys Ala Cys Thr Cys Cys 2120 2125 2130	3
Ala Cys Ala Thr Ala Ala Ala Thr Cys Ala Ala Gly Thr Gly Thr 2135 2140 2145	
Thr Ala Ala Ala Ala Gly Thr Gly Cys Thr Thr Thr Gly Ala Thr	
2150 2155 2160	
Thr Ala Ala Ala Cys Ala Gly Gly Ala Cys Ala Gly Gly Cys Gly	
2165 2170 2175	
Cys Gly Thr Thr Cys Thr Thr Gly Ala Gly Thr Thr Cys Ala Thr	
2180 2185 2190	
Cys Thr Gly Thr Thr Cys Ala Cys Ala Thr Ala Cys Thr Gly Thr	
2195 2200 2205	
Cys Thr Gly Gly Cys Ala Ala Gly Cys Gly Cys Thr Gly Ala Cys	<b>;</b>
2210 2215 2220	
Thr Gly Ala Gly Gly Gly Thr Cys Thr Cys Cys Thr Cys Thr Gly	
2225 2230 2235	
Thr Ala Cys Cys Cys Thr Gly Thr Thr Cys Thr Gly Ala Gly Ala	
2240 2245 2250	
Ala Cys Thr Ala Ala Cys Ala Ala Ala Ala Gly Ala Cys Gly Ala	
2255 2260 2265	
Ala Thr Cys Ala Ala Cys Ala Thr Ala Cys Ala Gly Ala Ala Ala	
2270 2275 2280	
Ala Cys Thr Gly Thr Thr Ala Thr Thr Thr Ala Gly Thr Gly Ala	
2285 2290 2295	
Cys Thr Gly Ala Thr Thr Ala Ala Ala Cys Thr Ala Ala Cys Gly	
2300 2305 2310	
Ala Ala Gly Gly Cys Ala Thr Gly Gly Gly Cys Thr Gly Gly Ala	
2315 2320 2325	
Gly Ala Ala Ala Thr Ala Ala Cys Thr Cys Ala Gly Cys Ala Gly	
2330 2335 2340	
Thr Thr Ala Ala Gly Ala Ala Cys Ala Thr Thr Thr Gly Cys Thr	
2345 2350 2355	
Gly Ala Thr Cys Thr Thr Gly Cys Ala Gly Ala Gly Gly Ala Cys	
2360 2365 2370	
Cys Thr Gly Gly Gly Thr Thr Gly Gly Gly Thr Thr Cys Cys Thr	

2375 2380 2385
Ala Gly Cys Ala Cys Ala Cys Ala Cys Ala Gly Gly Ala Cys 2390 2395 2400
Ala Gly Thr Thr Cys Cys Ala Gly Thr Cys Cys Cys Gly Gly Thr
2405 2410 2415
Gly Thr Gly Thr Cys Cys Thr Thr Thr Cys Thr Cys Ala Cys
2420 2425 2430
Thr Thr Cys Thr Gly Thr Gly Gly Ala Cys Ala Cys Ala Ala Gly
2435 2440 2445
Thr Thr Thr Ala Cys Ala Cys Ala Thr Ala Gly Thr Gly Cys
2450 2455 2460
Ala Cys Ala Cys Ala Cys Ala Cys Ala Cys Thr Cys Ala
2465 2470 2475
Cys Ala Thr Ala Thr Ala Ala Ala Ala Cys Ala Gly Ala 2480 2485 2490
Ala Cys Ala Thr Thr Ala Ala Ala Ala Gly Thr Ala Thr Gly
2495 2500 2505
Thr Thr Thr Ala Ala Ala Thr Ala Ala Cys Gly Gly Ala Ala Thr
2510 2515 2520
Cys Ala Thr Thr Thr Ala Thr Ala Thr Ala Gly Gly Thr Thr
2525 2530 2535
Thr Cys Ala Thr Thr Ala Cys Ala Thr Ala Gly Gly Thr Ala
2540 2545 2550
Ala Ala Thr Ala Gly Gly Cys Ala Ala Ala Ala Ala Thr Cys Thr 2555 2560 2565
Gly Cys Ala Thr Thr Thr Ala Thr Thr Gly Thr Thr Thr Cys
2570 2575 2580
Thr Ala Ala Gly Thr Thr Thr Ala Ala Thr Thr Thr Ala Thr
2585 2590 2595
Thr Thr Thr Cys Thr Cys Thr Gly Thr Gly Thr Gly Thr Ala
2600 2605 2610
Cys Ala Thr Ala Cys Gly Cys Ala Thr Gly Cys Cys Thr Cys Cys
2615 2620 2625
Thr Thr Ala Thr Cys Thr Gly Thr Ala Thr Gly Thr Gly Cys Gly
2630 2635 2640
Thr Gly Cys Ala Cys Thr Gly Thr Gly Thr Gly Cys Ala Thr Gly
2645 2650 2655
Cys Ala Thr Gly Ala Ala Cys Cys Cys Ala Cys Ala Gly Ala Gly 2660 2665 2670
2660 2665 2670 Ala Cys Cys Ala Gly Ala Ala Gly Ala Gly Thr Ala Cys Cys Ala
2675 2680 2685
Cys Ala Gly Ala Thr Thr Cys Thr Cys Thr Gly Gly Ala Gly Cys
2690 2695 2700
Thr Gly Gly Ala Gly Thr Gly Ala Thr Gly Ala Thr Ala Gly
2705 2710 2715
Gly Cys Thr Gly Thr Thr Gly Gly Ala Gly Cys Cys Ala Cys
2720 2725 2730
Thr Cys Cys Ala Cys Ala Thr Gly Gly Gly Ala Thr Thr Cys
2735 2740 2745
Ala Gly Ala Gly Thr Thr Gly Ala Ala Cys Thr Thr Cys Gly Thr

2750	0750 0755 0700
2765       2770       2775         Cys Cys Ala Gly Cys Thr Cys Thr Thr Ala Ala Cys Thr Gly Ala       2780         2780       2785       2790         Thr Gly Gly Cys Thr Thr Thr Thr Thr Ala Cys Cys Thr Cys Cys Ala       2795         2800       2805         Gly Cys Cys Ala Cys Cys Thr Thr Thr Thr Thr Cys Cys Thr Cys Ala       2810         2810       2815       2820         Thr Thr Thr Thr Thr Ala Ala Ala Ala Thr Thr Thr Cys Cys Thr       2825         2830       2835         Thr Cys Cys Thr Thr Cys Cys Thr Thr Thr Thr Thr Thr Gly Ala Gly       2845         2840       2845       2850         Ala Gly Gly Gly Thr Cys Thr Cys Thr Cys Ala Ala Thr Ala Cys       2855         2850       2860       2865         Thr Thr Ala Gly Cys Thr Cys Ala Thr Cys Cys Cys Ala Ala Cys       2876         2870       2875       2880         Thr Thr Gly Ala Cys Cys Cys Cys Cys Ala Cys Thr Cys Thr Thr Cys       2886         2870       2875       2880         Thr Cys Thr Thr Gly Cys Cys Thr Thr Ala Gly Thr Cys Ala Cys         2886       2890       2895         Thr Cys Thr Gly Cys Cys Cys Gys Ala Cys Thr Cys Ala Cys         2900       2905       2910         Cys Ala Cys Ala Ala Thr Gly Cys Gly Thr Thr Thr Thr Ala Ala <td< td=""><td></td></td<>	
2780 2785 2790 Thr Gly Gly Cys Thr Thr Thr Thr Ala Cys Cys Thr Cys Cys Ala 2795 2800 2805 Gly Cys Cys Ala Cys Cys Thr Thr Thr Thr Thr Thr Thr Cys Cys Thr Cys Ala 2810 2815 2820 Thr Thr Thr Thr Thr Ala Ala Ala Ala Thr Thr Thr Cys Cys Thr 2825 2830 2835 Thr Cys Cys Thr Thr Cys Cys Thr Thr Thr Thr Thr Gly Ala Gly 2840 2845 2850 Ala Cys Ala Gly Gly Gly Thr Cys Thr Cys Ala Ala Thr Ala Cys 2855 2860 Thr Thr Ala Gly Cys Thr Cys Ala Thr Cys Cys Cys Ala Ala Cys 2870 2875 2880 Thr Thr Gly Ala Cys Cys Cys Cys Ala Cys Thr Cys Thr Thr Cys 2885 2890 Thr Thr Gly Ala Cys Cys Cys Cys Ala Cys Thr Cys Ala Cys 2900 2905 2910 Cys Ala Cys Ala Ala Thr Gly Thr Thr Thr Thr Ala Gly Thr Thr Ala Ala Cys 2930 2935 2940 Thr Ala Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Ala Ala 2945 2950 Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Thr Thr Thr Ala Ala 2960 2965 2970 Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Thr Thr Thr Ala Ala 2960 2965 2970 Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala 2960 2965 2970 Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Thr Gly Ala Ala Gly 2975 2980 Thr Ala Gly Ala Cys Ala Ala Ala Ala Gly Gly Gly Gly Gly Ala Gly Gly 2995 3000 Ala Thr Cys Cys Cys Ala Ala Ala Ala Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015 Thr Gly Gly Cys Cys Ala Cys Ala Ala Ala Ala Gly Cys Cys Gly Thr Gly Ala Cys 3005 3025 3030 Cys Thr Thr Cys Ala Ala Gly Gly Gly Gly Cys Thr Gly Ala Ala Gly 3020 3025 3030 Cys Thr Thr Cys Ala Ala Gly Gly Gly Gly Cys Thr Gly Ala Ala Gly 3050 3055 3060 Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Cys Ala Thr Cys Ala Ala Gly Ala Gly Gly Ala Ala Gly Ala Ala Gly Cys Cys Cys Thr	
Thr Gly Gly Cys Thr Thr Thr Thr Ala Cys Cys Thr Cys Cys Ala 2795 2800 2805 Gly Cys Cys Ala Cys Cys Thr Thr Thr Thr Cys Cys Thr Cys Ala 2810 2815 2820 Thr Thr Thr Thr Thr Ala Ala Ala Ala Ala Thr Thr Thr Cys Cys Thr 2825 2830 2835 Thr Cys Cys Thr Thr Cys Cys Thr Thr Thr Thr Thr Thr Ala Ala Ala Ala Thr Thr Thr Thr Gly Ala Gly 2840 2845 2850 Ala Cys Ala Gly Gly Gly Thr Cys Thr Cys Ala Ala Thr Ala Cys 2855 2860 2865 Thr Thr Ala Gly Cys Thr Cys Ala Thr Cys Cys Cys Ala Ala Cys 2870 2875 2880 Thr Thr Gly Ala Cys Cys Cys Cys Ala Cys Thr Cys Ala Ala Cys 2885 2890 2895 Thr Thr Gly Ala Cys Cys Cys Cys Ala Cys Thr Cys Thr Thr Cys Ala Cys 2900 2905 2910 Cys Ala Cys Ala Ala Thr Gly Thr Thr Thr Ala Gly Thr Thr Thr 2915 2920 2925 Ala Thr Ala Ala Gly Cys Ala Thr Gly Cys Gly Thr Thr Thr Ala Ala 2945 2950 2955 Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Cys Thr Ala Ala Ala Cys Thr Cys Ala Cys 2990 2905 2950 Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala Ala 2945 2950 2955 Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Gly Gly Cys Thr Thr Thr Ala Ala 2960 2965 2970 Ala Thr Cys Cys Cys Ala Ala Ala Ala Ala Ala Gly Gly Gly Ala Ala Gly 2975 2980 2985 Thr Ala Gly Ala Cys Ala Ala Ala Ala Ala Gly Gly Gly Gly Ala Gly Gly 2990 2995 3000 Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015 Thr Gly Gly Cys Cys Cys Thr Gly Thr Cys Ala Ala Gly Ala Gly Gly Gly Cys Thr Gly Ala Ala Gly 3050 3055 3060 Gly Gly Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Ala Ala Gly Cys Cys Ala Ala Ala Gly Cys Cys Ala Ala Ala Gly Cys Cys Ala Cys Ala Ala Gly Ala Gly Ala Gly Ala Gly Cys Cys Cys Thr Cys Ala Ala Gly Ala Gly Ala Gly Gly Ala Thr Ala Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly Ala Gly Ala Gly Ala Gly Ala Gly Ala Gly Cys Cys Thr Cys Cys Ala Gly Ala Gly Gly Gly Cys Thr Cys Cys Thr Cys Cys Thr Cys Cys	
2795	Thr Glv Glv Cvs Thr Thr Thr Thr Ala Cvs Cvs Thr Cvs Cvs Ala
2810 2815 2820 Thr Thr Thr Thr Thr Ala Ala Ala Ala Thr Thr Thr Cys Cys Thr 2825 2830 2835 Thr Cys Cys Thr Thr Cys Cys Thr Thr Thr Cys Cys Thr 2840 2845 2850 Ala Cys Ala Gly Gly Gly Thr Cys Thr Cys Ala Ala Thr Ala Cys 2855 2860 2865 Thr Thr Ala Gly Cys Thr Cys Ala Thr Cys Cys Cys Ala Ala Cys 2870 2875 2880 Thr Thr Ala Gly Cys Thr Cys Ala Thr Cys Cys Cys Ala Ala Cys 2870 2875 2880 Thr Thr Gly Ala Cys Cys Cys Cys Ala Cys Thr Thr Cys Thr Thr Cys 2885 2890 2895 Thr Cys Thr Thr Gly Cys Cys Thr Thr Ala Gly Thr Cys Ala Cys 2900 2905 2910 Cys Ala Cys Ala Ala Thr Gly Thr Thr Thr Ala Gly Thr Thr Thr 2915 2920 2925 Ala Thr Ala Ala Gly Cys Ala Thr Gly Cys Gly Thr Cys Ala Cys 2930 2935 2940 Thr Ala Thr Gly Cys Cys Gly Gly Cys Thr Thr Ala Ala 2945 2950 2955 Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala 2945 2950 2955 Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Cys Cys Ala Thr Ala 2960 2965 2970 Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Ala Gly 2975 2980 2985 Thr Ala Gly Ala Cys Ala Ala Ala Gly Gly Gly Gly Gly Gly Gly Gly Ala Gly Gly 2990 2995 3000 Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015 Thr Gly Gly Cys Cys Ala Cys Ala Cys Cys Gly Thr Gly 3020 3025 3030 Cys Thr Thr Cys Ala Ala Ala Gly Cys Cys Gly Thr Gly 3050 3050 3055 3060 Gly Gly Ala Cys Cys Cys Thr Gly Thr Cys Ala Cys Ala Cys Ala Cys Ala Ala Ala Gly 3050 3055 3060 Gly Gly Ala Ala Thr Ala Ala Gly Cys Cys Ala Cys Ala Ala Gly 3065 3070 3075 Gly Gly Ala Ala Thr Ala Gly Ala Gly Cys Cys Thr Cys Ala Cys Cys Cys Thr Cys 3095 3100 3105 Thr Gly Gly Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105 Thr Gly Gly Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105 Thr Gly Gly Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105 Thr Gly Gly Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105 Thr Gly Gly Cys Cys Thr Cys Thr Cys Cys Ala Gly Gly 3110	2795 2800 2805
Thr Thr Thr Thr Thr Ala Ala Ala Ala Ala Thr Thr Thr Cys Cys Thr 2825 2830 2835  Thr Cys Cys Thr Thr Cys Cys Thr Thr Thr Thr Thr Gly Ala Gly 2840 2845 2850  Ala Cys Ala Gly Gly Gly Thr Cys Thr Cys Ala Ala Thr Ala Cys 2855 2860 2865  Thr Thr Ala Gly Cys Thr Cys Ala Thr Cys Cys Cys Ala Ala Cys 2870 2875 2880  Thr Thr Gly Ala Cys Cys Cys Cys Ala Cys Thr Cys Thr Thr Cys 2885 2890 2895  Thr Cys Thr Thr Gly Cys Cys Thr Thr Ala Gly Thr Cys Ala Cys 2900 2905 2910  Cys Ala Cys Ala Ala Thr Gly Thr Thr Ala Gly Thr Thr Thr 2915 2920 2925  Ala Thr Ala Ala Gly Cys Ala Thr Gly Cys Gly Thr Cys Ala Cys 2930 2935 2940  Thr Ala Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Ala Ala 2945 2950 2955  Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys 2970  Ala Thr Cys Cys Cys Cys Gly Gly Gly Cys Thr Thr Ala Ala Gly 2975 2980 2985  Thr Ala Gly Ala Cys Ala Ala Ala Ala Ala Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly 2975 2980 2995  Thr Ala Gly Ala Cys Ala Ala Ala Ala Ala Ala Gly Cys Thr Gly Ala Ala Gly 2975 2980 2995  Thr Ala Gly Ala Cys Ala Ala Ala Ala Ala Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015  Thr Gly Gly Cys Cys Ala Cys Ala Ala Ala Ala Gly Cys Cys Gly Thr Gly Ala Cys 3025 3030  Cys Thr Thr Cys Ala Ala Ala Gly Thr Thr Cys Ala Ala Gly Ala Gly Gly Gly Ala Gly Ala Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Ala Ala Gly Cys Thr Thr Cys Ala Ala Gly Ala Gly Cys Cys Ala Ala Gly Cys Cys Gly Thr Gly Ala Gly Ala Gly Ala Gly Ala Gly Gly Ala Ala Ala Ala Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Thr Cys Ala Ala Gly Ala Gly Ala Gly Ala Gly Ala Gly Ala Gly Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys Gly Sly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Gly Ala Gly Cys Cys Thr Cys Cys Ala G	
2825         2830         2835           Thr Cys         Cys Thr Thr Cys Cys         Thr Thr Thr Thr Thr Gly Ala Gly           2840         2845         2850           Ala Cys         Ala Gly Gly Gly Thr Cys         Thr Cys Cys           2855         2860         2865           Thr Thr         Ala Gly Cys Thr Cys         Ala Thr Cys Cys Cys         Ala Ala Cys           2870         2875         2880           Thr Thr Gly Ala Cys Cys Cys         Cys Ala Cys Thr Thr Cys         Thr Thr Cys           2885         2890         2895           Thr Cys         Thr Thr Gly Cys Cys         Thr Thr Ala Gly Thr Cys Ala Cys           2900         2905         2910           Cys Ala         Cys Ala Ala Thr Gly         Thr Thr Thr Thr Ala Gly Thr Thr Thr 2915           2920         2920         2925           Ala Thr Ala Ala Gly Cys Ala         Thr Gly Cys Gly Gly Gly Gly Thr Cys Ala Cys           2930         2935         2940           1hr Ala         Thr Gly Cys Cys Cys Gly Gly Gly Cys Thr Thr Thr Ala Ala         Ala Cys           2930         2935         2940           1hr Ala         Ala Ala Cys Cys Cys Cys Cys Cys Cys Ala Cys Cys Cys Ala Thr Ala         Ala Cys Cys Cys Cys Ala Cys Cys Ala Cys Cys Cys Ala Cys Cys Ala Cys Cys Cys Ala Cys Cys Cys	
Thr Cys         Cys Thr Thr Cys Cys         Thr Thr Thr Thr Gly Ala Gly         2840         2845         2850           Ala Cys         Ala Gly Gly Gly Thr         Cys Thr Cys Ala Ala         Thr Ala Cys         2855         2865           Thr Thr         Ala Gly Cys Thr Cys         Ala Thr Cys Cys Cys         Ala Ala Cys         2876         2880           Thr Thr         Gly Ala Cys Cys Cys         Cys Ala Cys Thr Thr Cys         2885         2890         2895           Thr Cys         Thr Thr Gly Cys Cys         Thr Thr Ala Gly Thr Cys Ala Cys         2900         2905         2910           Cys Ala         Cys Ala Ala Thr Gly Thr Thr Thr Ala Gly Thr Thr Thr         17         2915         2920         2925           Ala Thr         Ala Ala Gly Cys Ala         Thr Gly Cys Cys Cys         Gly Gly Cys Thr Thr Thr Ala Ala Cys         2930         2935         2940           Thr Ala         Thr Gly Cys Cys Cys Gly Gly Gly Cys Thr Thr Thr Ala Ala         292         2935         2940         2945         2950         2955         Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Cys Ala Thr Ala         2945         2950         2955         Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Cys Ala Gly Gly         2946         2970         Ala Thr Ala Ala Cys Cys Cys Ala Ala Ala Ala Gly Gly Gly Gly Ala Ala Gly Gly Gly         2990         2985	
2840 2845 2850 Ala Cys Ala Gly Gly Gly Thr Cys Thr Cys Ala Ala Thr Ala Cys 2855 2860 2865 Thr Thr Ala Gly Cys Thr Cys Ala Thr Cys Cys Cys Ala Ala Cys 2870 2875 2880 Thr Thr Gly Ala Cys Cys Cys Cys Ala Cys Thr Cys Thr Thr Cys 2885 2890 2895 Thr Cys Thr Thr Gly Cys Cys Thr Thr Ala Gly Thr Cys Ala Cys 2900 2905 2910 Cys Ala Cys Ala Ala Thr Gly Thr Thr Thr Ala Gly Thr Thr Thr Ala Cys 2930 2935 2940 Ala Thr Ala Ala Gly Cys Ala Thr Gly Cys Gly Gly Cys Thr Thr Ala Ala 2945 2950 2955 Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys 2930 2935 2940 Thr Ala Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Thr Ala Ala 2945 2950 2955 Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala Ala Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly 2975 2980 2985 Thr Ala Gly Ala Cys Ala Ala Ala Ala Ala Gly Gly Gly Gly Gly Ala Gly Gly 2990 2995 3000 Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015 Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Ala Cys Cys Gly Thr Gly Ala Cys 3005 3010 3045 Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Ala Ala Ala Gly Cys Cys Ala Ala Ala Gly 3050 3055 3060 Gly Gly Ala Ala Ala Gly Ala Gly Gly Cys Ala Cys Ala Ala Gly Ala Gly Gly Gly Ala Cys Cys Cys Thr Gly Thr Cys Ala Ala Gly Gly Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Ala Gly Gly Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Ala Gly Ala Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Ala Gly Ala Gly Gly Ala Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090 Cys Cys Thr Gly Ala Cys Cys Thr Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105 Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115	
Ala Cys Ala Giy Giy Giy Thr Cys Thr Cys Ala Ala Thr Ala Cys 2855 2860 2865  Thr Thr Ala Giy Cys Thr Cys Ala Thr Cys Cys Cys Ala Ala Cys 2870 2875 2880  Thr Thr Giy Ala Cys Cys Cys Cys Ala Cys Thr Cys Thr Thr Cys 2885 2890 2895  Thr Cys Thr Thr Giy Cys Cys Thr Thr Ala Giy Thr Cys Ala Cys 2900 2905 2910  Cys Ala Cys Ala Ala Thr Giy Thr Thr Thr Ala Giy Thr Thr Thr Thr 2915 2920 2925  Ala Thr Ala Ala Giy Cys Ala Thr Giy Cys Giy Thr Cys Ala Cys 2930 2935 2940  Thr Ala Thr Giy Cys Cys Giy Giy Cys Thr Thr Thr Ala Ala 2945 2950 2955  Ala Thr Ala Ala Cys Cys Cys Giy Giy Cys Thr Thr Ala Ala 2945 2950 2955  Ala Thr Cys Cys Cys Ala Giy Cys Ala Cys Cys Cys Ala Thr Ala 2960 2965 2970  Ala Thr Cys Cys Cys Ala Giy Cys Ala Cys Thr Giy Ala Ala Giy 2975 2980 2985  Thr Ala Giy Ala Cys Ala Ala Ala Ala Giy Giy Giy Giy Ala Giy Giy 2990 2995 3000  Ala Thr Cys Giy Ala Thr Giy Giy Giy Giy Cys Thr Giy Ala Cys 3005 3010 3015  Thr Giy Giy Cys Cys Ala Giy Thr Thr Cys Ala Ala Ala Thr Gys Cys Giy Thr Giy 3020 3025 3030  Cys Thr Thr Cys Ala Ala Ala Giy Thr Thr Cys Ala Ala Thr Giy Ala 3035 3040 3045  Ala Giy Ala Cys Cys Cys Thr Giy Thr Cys Ala Ala Cys Cys Cys Ala Cys Ala Ala 3065 3070 3075  Giy Giy Ala Ala Ala Ala Giy Giy Cys Ala Cys Ala Giy Ala 3080 3085 3090  Cys Cys Thr Giy Ala Cys Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Giy Giy Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Giy Giy Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Giy Giy Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Giy Giy Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Giy Giy Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105	
2855         2860         2865           Thr Thr         Ala Gly Cys Thr Cys         Ala Thr Cys Cys Cys         Ala Ala Cys           2870         2875         2880           Thr Thr         Gly Ala Cys Cys Cys         Cys Ala Cys Thr Cys         Thr Thr Cys           2885         2890         2895           Thr Cys         Thr Thr Gly Cys Cys         Thr Thr Ala Gly Thr Cys Ala Cys           2900         2905         2910           Cys Ala         Cys Ala Ala Thr Gly         Thr Thr Thr Ala Gly Thr Thr Thr Thr           2915         2920         2925           Ala Thr         Ala Ala Gly Cys Ala Thr Gly Cys Gly Thr Cys Ala Cys           2930         2935         2940           Thr Ala         Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Thr Thr Ala Ala Cys           2930         2935         2940           Thr Ala         Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Thr Ala Ala         Ala Cys           Ala Thr Gly Cys Cys Cys Cys Cys Gly Gly Cys Thr Thr Thr Ala Ala         Ala Ala Ala Cys Thr Cys Ala Cys Thr Gly Ala Ala Gly           2960         2965         2970           Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Gly Gly         2990           2995         3000           Ala Thr Cys Gly Ala Cys Ala Ala Ala Ala Gly Gly Cys Cys Gly	
2870         2875         2880           Thr Thr         Gly Ala Cys Cys Cys Cys Ala Cys Thr Cys Thr Thr Cys 2885         2890         2895           Thr Cys         Thr Thr Gly Cys Cys Thr Thr Ala Gly Thr Cys Ala Cys 2900         2905         2910           Cys Ala         Ala Thr Gly Thr Thr Thr Ala Gly Thr Thr Thr 2915         2920         2925           Ala Thr         Ala Ala Gly Cys Ala Thr Gly Cys Gly Thr Cys Ala Cys 2930         2935         2940           Thr Ala Thr Gly Cys Cys Ala Thr Gly Cys Gly Gly Cys Thr Thr Thr Ala Ala 2945         2950         2955           Ala Thr         Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala 2960         2965         2970           Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly 2975         2980         2985           Thr Ala         Gly Ala Cys Ala Ala Ala Ala Gly Gly Gly Gly Ala Gly Gly 2990         2995         3000           Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005         3010         3015         3016           Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Cys Gly Thr Gly Ala 202         3025         3030         3045           Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Ala Ala Thr Gly Ala 3035         3040         3045           Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly Ala 3065         3070         3075           Gly Gly Ala Thr Ala Gly Ala Gly C	
2870         2875         2880           Thr Thr         Gly Ala Cys Cys Cys Cys Ala Cys Thr Cys Thr Thr Cys 2885         2890         2895           Thr Cys         Thr Thr Gly Cys Cys Thr Thr Ala Gly Thr Cys Ala Cys 2900         2905         2910           Cys Ala         Ala Thr Gly Thr Thr Thr Ala Gly Thr Thr Thr 2915         2920         2925           Ala Thr         Ala Ala Gly Cys Ala Thr Gly Cys Gly Thr Cys Ala Cys 2930         2935         2940           Thr Ala Thr Gly Cys Cys Ala Thr Gly Cys Gly Gly Cys Thr Thr Thr Ala Ala 2945         2950         2955           Ala Thr         Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala 2960         2965         2970           Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly 2975         2980         2985           Thr Ala         Gly Ala Cys Ala Ala Ala Ala Gly Gly Gly Gly Ala Gly Gly 2990         2995         3000           Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005         3010         3015         3016           Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Cys Gly Thr Gly Ala 202         3025         3030         3045           Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Ala Ala Thr Gly Ala 3035         3040         3045           Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly Ala 3065         3070         3075           Gly Gly Ala Thr Ala Gly Ala Gly C	Thr Thr Ala Gly Cys Thr Cys Ala Thr Cys Cys Cys Ala Ala Cys
2885	
2885	Thr Thr Gly Ala Cys Cys Cys Ala Cys Thr Cys Thr Thr Cys
2900       2905       2910         Cys Ala Cys Ala Cys Ala Ala Thr Gly Thr Thr Thr Ala Gly Thr Thr Thr 2915       2920       2925         Ala Thr Ala Ala Gly Cys Ala Thr Gly Cys Gly Thr Cys Ala Cys 2930       2935       2940         Thr Ala Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Thr Ala Ala 2945       2950       2955         Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala 2960       2965       2970         Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly 2975       2980       2985         Thr Ala Gly Ala Cys Ala Ala Ala Ala Ala Gly Gly Gly Gly Gly Ala Gly Gly 2990       2995       3000         Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005       3010       3015         Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly 3020       3025       3030         Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035       3040       3045         Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly Ala Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065       3070       3075         Gly Gly Ala Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080       3085       3090         Cys Cys Thr Gly Ala Cys Cys Thr Cys Thr Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095       3100       3105         Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110       3115       3120	2885 2890 2895
Cys Ala Cys Ala Ala Thr Gly Thr Thr Thr Ala Gly Thr Thr Thr 2915 2920 2925  Ala Thr Ala Ala Gly Cys Ala Thr Gly Cys Gly Thr Cys Ala Cys 2930 2935 2940  Thr Ala Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Thr Ala Ala 2945 2950 2955  Ala Thr Ala Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala 2960 2965 2970  Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly 2975 2980 2985  Thr Ala Gly Ala Cys Ala Ala Ala Ala Ala Ala Gly Gly Gly Gly Ala Gly Gly 2990 2995 3000  Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015  Thr Gly Gly Cys Cys Ala Cys Ala Ala Ala Gly Cys Cys Gly Thr Gly 3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Cys Ala Gly Ala 3050 3055 3060  Gly Gly Ala Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	Thr Cys Thr Thr Gly Cys Cys Thr Thr Ala Gly Thr Cys Ala Cys
2915	2900 2905 2910
Ala Thr Ala Ala Gly Cys Ala Thr Gly Cys Gly Thr Cys Ala Cys 2930 2935 2940  Thr Ala Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Thr Ala Ala 2945 2950 2955  Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala 2960 2965 2970  Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly 2975 2980 2985  Thr Ala Gly Ala Cys Ala Ala Ala Ala Gly Gly Gly Ala Gly Gly 2990 2995 3000  Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015  Thr Gly Gly Cys Cys Ala Cys Ala Ala Ala Gly Cys Cys Gly Thr Gly 3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	Cys Ala Cys Ala Ala Thr Gly Thr Thr Thr Ala Gly Thr Thr Thr
2930       2935       2940         Thr Ala       Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Thr Ala Ala         2945       2950       2955         Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala       2960       2965         2970       2980       2985         Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly       2975       2980         2990       2995       3000         Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys       3005       3010         3005       3010       3015         Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly       3020       3025         3030       3040       3045         Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly       3050         Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala       3060         Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Cys Ala Cys Ala Gly Ala       3065         3070       3075         Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly         3080       3085       3090         Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys       3095       3100       3105         Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Cys Ala Gly Gly       3110       3115       3120	2915 2920 2925
Thr Ala Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Thr Ala Ala 2945 2950 2955  Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala 2960 2965 2970  Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly 2975 2980 2985  Thr Ala Gly Ala Cys Ala Ala Ala Ala Gly Gly Gly Gly Ala Gly Gly 2990 2995 3000  Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015  Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly 3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	Ala Thr Ala Ala Gly Cys Ala Thr Gly Cys Gly Thr Cys Ala Cys
2945       2950       2955         Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala       2960       2965       2970         Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly       2975       2980       2985         Thr Ala Gly Ala Cys Ala Ala Ala Ala Ala Gly	2930 2935 2940
Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala 2960 2965 2970  Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly 2975 2980 2985  Thr Ala Gly Ala Cys Ala Ala Ala Ala Gly Gly Gly Ala Gly Gly 2990 2995 3000  Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015  Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly 3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	Thr Ala Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Thr Ala Ala
2960       2965       2970         Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Ala Gly       2975       2980       2985         Thr Ala Gly Ala Cys Ala Ala Ala Ala Ala Gly	2945 2950 2955
Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly 2975 2980 2985  Thr Ala Gly Ala Cys Ala Ala Ala Ala Gly Gly Gly Gly Ala Gly Gly 2990 2995 3000  Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015  Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly 3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	Ala Thr Ala Ala Ala Cys Thr Cys Ala Cys Cys Cys Ala Thr Ala
2975       2980       2985         Thr Ala Gly Ala Cys Ala Ala Ala Ala Ala Gly Gly Gly Gly Ala Gly Gly       2990       2995       3000         Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys       3005       3010       3015         Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly       3020       3025       3030         Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala       3035       3040       3045         Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly       3050       3055       3060         Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala       3065       3070       3075         Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly       3080       3085       3090         Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys       3095       3100       3105         Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly       3115       3120	2960 2965 2970
Thr Ala Gly Ala Cys Ala Ala Ala Ala Gly Gly Gly Ala Gly Gly 2990 2995 3000  Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015  Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly 3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Ala Gly Gly 3110 3115 3120	Ala Thr Cys Cys Cys Ala Gly Cys Ala Cys Thr Gly Ala Ala Gly
2990 2995 3000  Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015  Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly 3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	2975 2980 2985
Ala Thr Cys Gly Ala Thr Gly Gly Gly Gly Cys Thr Gly Ala Cys 3005 3010 3015  Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly 3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Ala Gly Gly 3110 3115 3120	
3005 3010 3015  Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly 3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Ala Gly Gly 3110 3115 3120	
Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly 3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Ala Gly Gly 3110 3115 3120	
3020 3025 3030  Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala 3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	Thr Gly Gly Cys Cys Ala Cys Ala Ala Gly Cys Cys Gly Thr Gly
3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Ala Gly Gly 3110 3115 3120	
3035 3040 3045  Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly 3050 3055 3060  Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075  Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Ala Gly Gly 3110 3115 3120	Cys Thr Thr Cys Ala Ala Gly Thr Thr Cys Ala Ala Thr Gly Ala
3050 3055 3060 Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075 Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090 Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105 Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Ala Gly Gly 3110 3115 3120	
3050 3055 3060 Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala 3065 3070 3075 Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090 Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105 Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Ala Gly Gly 3110 3115 3120	Ala Gly Ala Cys Cys Cys Thr Gly Thr Cys Thr Cys Ala Ala Gly
3065 3070 3075 Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090 Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105 Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	3050 3055 3060
Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly 3080 3085 3090  Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys 3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	Gly Gly Ala Ala Thr Ala Ala Gly Gly Cys Ala Cys Ala Gly Ala
3080       3085       3090         Cys Cys       Thr Gly Ala Cys Cys       Thr Cys Cys Thr Cys       Cys Thr Cys         3095       3100       3105         Thr Gly       Gly Cys Cys Thr Cys       Thr Ala Cys Cys Cys Cys Ala Gly Gly         3110       3115       3120	3065 3070 3075
3080       3085       3090         Cys Cys       Thr Gly Ala Cys Cys       Thr Cys Cys Thr Cys       Cys Thr Cys         3095       3100       3105         Thr Gly       Gly Cys Cys Thr Cys       Thr Ala Cys Cys Cys Cys Ala Gly Gly         3110       3115       3120	Gly Gly Ala Thr Ala Gly Ala Gly Cys Cys Ala Thr Ala Cys Gly
3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	
3095 3100 3105  Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly 3110 3115 3120	Cys Cys Thr Gly Ala Cys Cys Thr Cys Cys Thr Cys Cys Thr Cys
3110 3115 3120	
3110 3115 3120	Thr Gly Gly Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Gly Gly
Cys Ala Cys Ala Thr Gly Thr Gly Cys Ala Thr Ala Cys Ala Cys	
	Cys Ala Cys Ala Thr Gly Thr Gly Cys Ala Thr Ala Cys Ala Cys

3125	3130 3135
	Ala Cys Cys Ala Cys Ala Cys Ala Cys Ala Cys Ala Cys
3140	3145 3150
	Ala Cys Ala Cys Ala Cys Ala Cys Ala Cys Ala
3155	3160 3165
	Cys Ala Cys Ala Cys Ala Gly Ala Gly Ala Gly
3170	3175 3180
	Ala Gly Ala Gly Ala Gly Ala Gly Ala Gly Ala
3185	3190 3195
	Gly Ala Gly Ala Gly Ala Gly Ala Gly Ala Gly
3200	3205 3210
	Ala Gly Ala Gly Ala Ala Ala Cys Thr Thr
3215	3220 3225
	Cys Cys Thr Cys Thr Thr Thr Thr Thr Thr Thr Thr
3230	3235 3240
	Ala Ala Ala Thr Ala Thr Thr Ala Thr
3245	3250 3255
	Cys Ala Thr Gly Thr Ala Thr Ala Thr Gly Ala Gly Thr
3260	3265 3270
	Ala Cys Thr Gly Thr Thr Gly Cys Thr Gly Thr Cys Thr
3275	3280 3285
	Ala Gly Ala Cys Ala Cys Cys Cys Ala Ala Ala Ala
3290	3295 3300
	Ala Gly Gly Cys Ala Thr Cys Ala Gly Ala Thr Cys Cys
3305	3310 3315
Cys Ala	Thr Thr Gly Ala Cys Ala Ala Ala Thr Gly Gly Thr Thr
3320	3325 3330
Gly Thr	Gly Ala Gly Cys Cys Ala Cys Cys Ala Thr Gly Thr Gly
3335	3340 3345
Gly Thr	Thr Gly Cys Thr Gly Gly Gly Ala Ala Thr Thr Gly Ala
3350	3355 3360
Ala Cys	Thr Cys Ala Gly Gly Ala Cys Cys Thr Cys Thr Gly Gly
3365	3370 3375
Ala Ala	Ala Ala Gly Cys Ala Gly Thr Cys Ala Gly Thr Gly Cys
3380	3385 3390
Thr Cys	Thr Thr Ala Ala Cys Cys Ala Thr Cys Thr Cys Thr Thr
3395	3400 3405
Cys Ala	Gly Cys Cys Cys Ala Cys Ala Ala Ala Gly Ala Ala
3410	3415 3420
Ala Cys	Thr Thr Thr Ala Ala Thr Gly Ala Gly Cys Ala Ala
3425	3430 3435
Ala Thr	Ala Ala Thr Thr Gly Cys Thr Thr Cys Cys Ala Ala Gly
3440	3445 3450
Thr Ala	Ala Ala Thr Ala Cys Thr Ala Cys Thr Ala Ala Thr Ala
3455	3460 3465
	Thr Thr Cys Thr Ala Ala Cys Cys Ala Thr Ala Cys
3470	3475 3480
	Thr Ala Cys Ala Ala Gly Gly Ala Ala Thr Thr Ala Thr
3485	3490 3495
Thr Ala	Ala Ala Gly Ala Ala Cys Gly Gly Ala Thr Ala Ala Thr

0500 0505 0540
3500 3505 3510
Ala Gly Gly Ala Gly Ala Ala Ala Ala Ala Ala Ala Ala Thr 3515 3520 3525
Thr Ala Thr Ala Ala Gly Thr Cys Ala Cys Thr Thr Thr Ala Thr
3530 3535 3540
Ala Ala Thr Gly Cys Thr Ala Thr Cys Thr Ala Ala Thr Cys Cys
3545 3550 3555
Ala Thr Cys Thr Ala Gly Ala Ala Cys Ala Ala Ala Ala Ala Cys
3560 3565 3570
Ala Cys Thr Gly Thr Ala Ala Thr Ala Ala Thr Gly Cys Ala Ala
3575 3580 3585
Ala Ala Gly Ala Gly Cys Gly Cys Ala Gly Thr Gly Cys Cys Thr
3590 3595 3600
Ala Gly Ala Thr Thr Ala Ala Ala Thr Ala Ala Thr Ala Ala
3605 3610 3615
Ala Ala Thr Gly Cys Ala Gly Ala Cys Cys Ala Ala Thr Ala Ala
3620 3625 3630
Gly Thr Ala Ala Ala Cys Thr Thr Thr Ala Thr Ala Gly Cys Ala
3635 3640 3645
Gly Cys Ala Cys Ala Thr Gly Gly Ala Ala Ala Thr Gly Ala Cys
3650 3655 3660
Gly Ala Ala Ala Thr Thr Cys Cys Thr Ala Ala Cys Ala Ala Ala
3665 3670 3675
Ala Ala Gly Cys Thr Cys Ala Ala Gly Ala Thr Gly Gly Gly Cys
3680 3685 3690
Ala Gly Thr Thr Thr Ala Thr Thr Ala Ala Ala Gly Thr Gly
3695 3700 3705
Ala Ala Ala Thr Ala Cys Ala Gly Gly Ala Gly Ala Ala Ala Thr
3710 3715 3720
Ala Ala Ala Gly Cys Ala Cys Ala Gly Ala Ala Ala Gly Ala Thr
3725 3730 3735
Ala Cys Thr Cys Ala Ala Ala Gly Gly Cys Ala Thr Ala Gly Ala
3740 3745 3750
Ala Gly Thr Thr Ala Ala Cys Ala Thr Ala Gly Gly Gly Gly
3755 3760 3765
Gly Cys Thr Gly Gly Cys Gly Ala Gly Ala Thr Gly Gly Cys Thr
3770 3775 3780
Cys Thr Ala Cys Ala Gly Gly Thr Ala Ala Gly Ala Gly Cys Ala 3785 3790 3795
Cys Cys Cys Gly Ala Cys Thr Gly Cys Thr Cys Thr Thr Cys Cys
3800 3805 3810
Ala Ala Gly Gly Thr Cys Cys Thr Gly Ala Gly Thr Thr Cys
3815 3820 3825
Ala Ala Ala Thr Cys Cys Cys Ala Gly Cys Ala Ala Cys Cys Ala
3830 3835 3840
Cys Ala Thr Gly Gly Thr Gly Gly Cys Thr Cys Ala Cys Ala Ala
3845 3850 3855
Cys Cys Ala Thr Cys Cys Gly Thr Ala Ala Thr Gly Ala Gly Ala
3860 3865 3870
Thr Thr Gly Ala Cys Thr Cys Cys Cys Thr Cys Thr Thr Cys
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3875	3880	3885
Thr Gly	Gly Thr Gly Thr Gly	Thr Cys Thr Gly Ala Ala Gly Ala
3890	3895	3900
Cys Ala	Gly Cys Thr Ala Cys	Ala Gly Thr Gly Thr Ala Cys Thr
3905	3910	3915
Thr Ala	Ala Cys Ala Thr Ala	Thr Ala Ala Thr Ala Ala Ala Thr
3920	3925	3930
Ala Ala	Ala Thr Ala Ala Ala	Ala Cys Thr Thr Thr Ala Ala Ala
3935	3940	3945
Ala Ala	Ala Ala Ala Ala 7	Thr Thr Ala Ala Ala Gly Ala Ala
3950	3955	3960
Gly Thr	Thr Ala Ala Cys Ala	Thr Ala Gly Ala Ala Gly Cys Cys
3965	3970	3975
Cys Ala	Cys Thr Cys Ala Gly	Gly Ala Cys Cys Cys Ala Cys
3980	3985	3990
Thr Cys	Ala Gly Thr Cys Cys	Thr Ala Gly Ala Gly Thr Ala Thr
3995	4000	4005
Gly Ala	Cys Ala Thr Thr Ala	Thr Thr Ala Thr Gly Gly Ala Cys
4010	4015	4020
Ala Thr	Thr Ala Ala Ala Ala	Ala Gly Ala Gly Ala Ala Ala Ala
4025	4030	4035
Thr Thr	Cys Ala Gly Cys Ala	Gly Thr Ala Gly Thr Gly Thr Gly
4040	4045	4050
Cys Ala	Thr Gly Cys Ala Cys	Thr Gly Cys Ala Thr Ala Thr Ala
4055	4060	4065
Thr Ala	Cys Ala Cys Ala Ala	Ala Thr Cys Cys Thr Thr Gly Ala
4070	4075	4080
Gly Thr	Thr Thr Cys Ala Thr	Ala Cys Cys Ala Ala Ala Thr Gly
4085	4090	4095
Cys Cys	Thr Thr Thr Ala Gly	Ala Cys Cys Ala Cys Thr Thr Gly
4100	4105	4110
Thr Gly	Gly Cys Thr Cys Thr	Gly Cys Ala Ala Ala Cys Cys Thr
4115	4120	4125
Gly Thr	Ala Ala Thr Cys Cys	Thr Ala Gly Cys Ala Cys Thr Thr
4130	4135	4140
Gly Thr	Gly Ala Ala Ala Ala	Gly Gly Thr Cys Ala Gly Cys Thr
4145	4150	4155
Cys Ala	Gly Gly Ala Ala Cys	Thr Thr Gly Gly Gly Ala Ala
4160	4165	4170
Gly Gly	Thr Cys Ala Thr Gly	Ala Ala Ala Cys Thr Cys Thr Thr
4175	4180	4185
Gly Cys	Cys Cys Cys Thr Cy	s Cys Ala Gly Ala Ala Gly Gly Gly
4190	4195	4200
Ala Gly	Ala Gly Gly Cys Thr	Ala Ala Thr Thr Ala Ala Cys Ala
4205	4210	4215
Thr Thr	Thr Cys Thr Cys Ala	Gly Ala Cys Cys Ala Cys Ala Gly
4220	4225	4230
Gly Gly	Cys Gly Gly Gly Ala	Ala Cys Cys Gly Ala Cys Cys Thr
4235	4240	4245
Glv Cvs	Gly Gly Gly Thr Gly	Gly Gly Gly Ala Cys Ala Gly Ala

4250	4255	4260
		Cys Cys Ala Thr Thr Cys Cys
4265	4270	4275
		Gly Gly Ala Ala Gly Thr Cys Cys
4280	4285	4290
		Cys Thr Cys Ala Thr Thr Cys Cys
4295	4300	4305
		Cys Cys Ala Ala Thr Cys Ala Ala
4310	4315	4320
		Gly Gly Thr Gly Cys Ala Cys Thr
4325	4330	4335
		Cys Ala Ala Thr Cys Ala Thr Ala
4340	4345	4350
		Thr Ala Gly Thr Thr Gly Cys Thr
4355	4360	4365
		Thr Ala Thr Thr Cys Thr Gly Cys
4370	4375	4380
		Ala Ala Cys Cys Gly Thr Ala Thr
4385	4390	4395
		Ala Gly Cys Gly Ala Ala Gly Gly
4400	4405	4410
		Gly Gly Gly Thr Ala Ala Cys
4415	4420	4425
	Cys Cys Thr Cys Th	r Cys Cys Thr Thr Cys Ala Gly Gly
4430	4435	4440
Thr Cys	Thr Gly Gly Gly Ala	Cys Ala Ala Thr Cys Cys Cys Ala
4445	4450	4455
Cys Thr	Ala Cys Ala Cys Thr	Gly Gly Ala Ala Cys Ala Ala Thr
4460	4465	4470
Ala Ala	Thr Thr Cys Cys	Thr Cys Thr Gly Gly Cys Thr Thr
4475	4480	4485
Thr Thr	Thr Gly Cys Ala Thr	Thr Gly Ala Thr Cys Ala Cys Ala
4490	4495	4500
Gly Cys	Thr Cys Cys Ala Cys	Thr Thr Cys Gly Thr Gly Gly Thr
4505	4510	4515
Ala Ala	Gly Thr Thr Ala Ala C	Gly Ala Cys Thr Cys Cys Cys Thr
4520	4525	4530
Gly Gly	Ala Gly Thr Cys Thr	Thr Ala Cys Ala Thr Thr Gly Gly
4535	4540	4545
Cys Ala	Ala Ala Thr Gly Cys	Ala Gly Gly Cys Ala Ala Ala Ala
4550	4555	4560
Gly Ala	Ala Thr Cys Cys Gly	Ala Ala Ala Cys Thr Cys Ala Ala
4565	4570	4575
	•	Thr Ala Ala Ala Cys Thr Ala
4580	4585	4590
-	• •	Ala Gly Cys Ala Thr Gly Cys Thr
4595	4600	4605
		Thr Gly Gly Gly Cys Thr Cys Cys
4610	4615	4620
Ala Thr	Gly Ala Gly Ala Cys	Cys Cys Thr Gly Gly Gly Gly

4625	4630	4635
Ala Gly Gly	Gly Gly Cys Ala	Gly Ala Gly Gly Gly Ala Gly Ala
4640	4645	4650
Cys Cys GI	y Thr Thr Cys Ala	Gly Ala Ala Gly Ala Cys Ala Gly
4655	4660	4665
Thr Cys Ala	a Ala Gly Ala Thr(	Gly Thr Thr Gly Cys Ala Gly Cys
4670	4675	4680
Ala Gly Cys	Ala Cys Ala Gly	Gly Cys Ala Gly Cys Cys Thr Gly
4685	4690	4695
Gly Cys Cy		Gly Thr Gly Cys Thr Gly Thr Cys
4700	4705	4710
	-	Ala Thr Gly Thr Thr Ala Ala Thr
4715	4720	4725
-		hr Ala Ala Ala Gly Cys Cys Thr
4730	4735	4740
-	ι Thr Cys Ala Thr (	Gly Ala Cys Thr Cys Thr Cys Cys
4745	4750	4755
Cys Ala Gly	/ Thr Thr Thr Thr /	Ala Thr Ala Ala Thr Thr Gly Gly
4760	4765	4770
Ala Ala Ala		la Ala Ala Gly Gly Ala Ala Ala
4775	4780	4785
Gly Ala Cys		Gly Gly Ala Ala Cys Ala Ala Cys
4790	4795	4800
Thr Gly Thr	Gly Thr Thr Cys /	Ala Gly Ala Ala Cys Ala Cys Thr
4805	4810	4815
Ala Thr Thr		la Thr Ala Gly Cys Ala Ala Ala
4820	4825	4830
		Gly Ala Gly Thr Ala Ala Cys Cys
4835	4840	4845
-		Cys Thr Ala Gly Ala Cys Ala Thr
4850	4855	4860
		Gly Gly Ala Ala Gly Ala Thr Cys
4865	4870	4875
_		Ala Gly Cys Thr Thr Ala Thr Thr
4880	4885	4890
-		ys Thr Thr Thr Ala Cys Ala Ala
4895	4900	4905
-		hr Ala Thr Gly Thr Ala Ala Ala
4910	4915	4920
-		Ala Cys Ala Gly Thr Thr Thr Thr
4925	4930	4935
=		Gly Thr Thr Thr Gly Thr Thr
4940	4945	4950
-		Gly Thr Thr Thr Ala Gly Gly
4955	4960	4965
-		la Thr Thr Cys Ala Thr Ala Thr
4970	4975	4980
_		hr Gly Ala Ala Thr Gly Ala Ala
4985	4990	4995
AIA AIA CYS	S Cys Cys Ala Ala	Ala Cys Thr Thr Ala Ala Ala Ala

Thr Thr Cys Cys Cys Cys Ala Cys Thr Ala Thr Gly Cys Thr Thr Thr Ala Ala Ala Gly Gly Cys Thr Thr Thr Cys Thr Gly Ala Cys Ala Ala Thr Ala Ala Cys Ala Gly Ala Ala Ala Gly Ala Gly Ala Ala Ala Thr Ala Gly Ala Gly Ala Ala Thr Cys Cys Ala Thr Ala Ala Ala Ala Cys Thr Ala Gly Thr Thr Cys Thr Gly Ala Ala Ala Cys Thr Ala Thr Cys Ala Ala Thr Ala Gly Gly Cys Thr Thr Gly Ala Cys Ala Cys Thr Cys Thr Thr Thr Ala Gly Cys Thr Gly Cys Cys Ala Gly Gly Ala Gly Ala Gly Cys Thr Gly Ala Ala Thr Cys Thr Gly Ala Ala Cys Ala Cys Ala Gly Gly Gly Ala Ala Cys Cys Cys Cys Ala Cys Cys Cys Ala Gly Cys Ala Cys Cys Cys Ala Ala Ala Thr Thr Gly Gly Ala Thr Thr Ala Thr Thr Gly Thr Thr Thr Ala Thr Thr Thr Ala Thr Cys Thr Thr Thr Cys Cys Cys Cys Cys Cys Cys Cys Cys Ala Ala Gly Ala Cys Ala Gly Gly Gly Thr Thr Thr Cys Thr Cys Thr Gly Cys Gly Thr Gly Gly Thr Cys Cys Thr Gly Gly Cys Thr Gly Thr Cys Cys Thr Gly Gly Ala Ala Cys Thr Cys Gly Gly Ala Gly Ala Thr Cys Cys Thr Cys Thr Gly Cys Cys Thr Cys Thr Cys Thr Gly Cys Cys Thr Cys Thr Cys Thr Gly Cys Cys Thr Gly Cys Cys Thr Cys Thr Cys Thr Cys Thr Gly Cys Cys Thr Gly Cys Cys Thr Gly Cys Cys Cys Cys Thr Cys Gly Cys Thr Gly Cys Cys Thr Cys Thr Cys Thr Cys Thr Gly Cys Cys Thr Cys Thr Cys Thr Cys Thr Gly Cys Cys Cys Thr Cys Thr Cys Thr Gly Cys Cys Cys Cys Thr Cys Thr Cys

5375 5380 5385
5375 5380 5385  Thr Gly Cys Cys Cys Cys Thr Cys Thr Cys Thr Cys
5390 5395 5400
Cys Cys Cys Thr Cys Thr Cys Thr Gly Cys Cys Thr Cys Thr Cys
5405 5410 5415
Thr Cys Thr Cys Thr Gly Cys Cys Cys Cys Thr Cys Thr Cys Thr
5420 5425 5430
Gly Cys Cys Thr Cys Thr Gly Cys Cys Thr Cys Thr Gly
5435 5440 5445
Cys Cys Thr Cys Cys Thr Gly Ala Gly Thr Gly Cys Thr Gly Gly
5450 5455 5460
Gly Ala Thr Thr Ala Ala Ala Gly Gly Cys Ala Thr Cys Ala
5465 5470 5475
Gly Cys Cys Ala Thr Cys Ala Cys Thr Thr Cys Cys Ala Gly Cys
5480 5485 5490
Thr Thr Cys Cys Thr Thr Thr Ala Thr Cys Ala Thr Thr Thr Thr
5495 5500 5505
Ala Ala Ala Ala Gly Ala Ala Thr Thr Cys Cys Thr Ala
5510 5515 5520
Thr Gly Thr Gly Ala Cys Thr Ala Cys Thr Gly Thr Ala Thr Thr
5525 5530 5535
Thr Ala Ala Ala Thr Cys Ala Cys Cys Ala Cys Ala Cys Gly Gly
5540 5545 5550
Cys Cys Ala Ala Thr Ala Cys Thr Cys Cys Cys Cys Cys Cys
5555 5560 5565
Ala Ala Cys Thr Cys Cys Thr Cys Cys Ala Ala Ala Thr Cys
5570 5575 5580
Cys Cys Cys Thr Cys Thr Ala Cys Cys Cys Ala Cys Thr Cys Ala
5585 5590 5595
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Ala Ala Ala Thr Cys Thr Thr Gly Gly Thr Gly Ala Ala Ala Cys Cys Cys Ala Thr Gly Cys Ala Thr Thr Thr Gly Cys Ala Thr Thr Thr Gly Thr Gly Thr Gly Thr Cys Cys Thr Ala Cys Ala Ala Ala Cys Ala Cys Thr Gly Ala Ala Gly Gly Thr Thr Ala Ala Gly Ala Ala Gly Cys Ala Thr Gly Cys Thr Cys Cys Thr Thr Ala Gly Thr Ala Ala Thr Thr Thr Ala Thr Ala Gly Cys Ala Gly Thr Thr Thr Gly Cys Gly Thr Thr Thr Cys Cys Ala Gly Ala Thr Thr Gly Ala Ala Ala Cys Ala Gly Ala Thr Thr Cys Thr Ala Thr Ala Gly Gly Cys Thr Ala Cys Ala Cys Ala Gly Thr Gly Cys Thr Ala Ala Ala Thr Gly Gly Ala Thr Thr Ala Thr Gly Cys Thr Cys Ala Gly Ala Thr Ala Cys Ala Gly Ala Thr Thr Gly Ala Ala Ala Ala Gly Gly Ala Thr Ala Cys Ala Gly Ala Thr Thr Gly Ala Ala Ala Ala Gly Gly Gly Thr Cys Gly Gly Gly Gly Thr Cys Thr Gly Gly Gly Cys Cys Ala Gly Gly Ala Thr Gly Ala Cys Gly Gly Gly Cys Cys Ala Ala Cys Thr Ala Thr Cys Thr Thr Thr Gly Cys Cys Cys Gly Gly Cys Thr Thr Gly Thr Cys Cys Thr Thr Cys Ala Gly Gly Gly Ala Ala Gly Gly Gly Thr Thr Ala Cys Ala Gly Gly Ala Thr Thr Cys Ala Cys Cys Ala Cys Thr Gly Gly Gly Gly Thr Gly Thr Gly Gly Cys Cys Thr Ala Thr Cys Thr Gly Cys Thr Gly Thr Thr Ala Gly Gly Ala Cys Cys Thr Gly Ala Ala Thr Thr Gly Cys Cys Thr Gly Gly Ala Gly Thr Gly Thr Thr Thr Cys Thr Ala Gly Thr Thr Cys Cys Cys Ala Cys Thr Ala Gly Thr Thr Gly Thr Thr Gly Ala Ala Cys Thr Thr Thr Ala Cys Cys Thr Thr Gly Ala Ala Cys Cys Thr Cys Thr Gly Cys Thr Cys Cys Cys Ala Gly <210> 9

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Cys Ala Cys Ala Ala Thr Ala Ala Thr Thr Gly Ala Gly Thr Gly Gly
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Thr Gly Gly Cys Cys Ala Gly